

“What I care most about are definitions. For one thing, humans describe mathematics through language, and, as always, we need sharp words in order to articulate our ideas clearly. For example, for a long time, I had some idea of the concept of diamonds. But only when I came up with a good name could I really start to think about it, let alone communicate it to others. Finding the name took several months (or even a year?). Then it took another two or three years to finally write down the correct definition (among many close variants).

...

Unfortunately, it is impossible to find the right definitions by pure thought; one needs to detect the correct problems where progress will require the isolation of a new key concept.”

—Peter Scholze

## The Trivial Notions Seminar Proudly Announces

### The Peter Scholze fan club

A talk by  
Sam Marks

#### **Abstract**

To kick off the inaugural meeting of the Peter Scholze fan club, I will give a high-level introduction to a few of Scholze’s most influential ideas. These include: condensed mathematics, a different approach to doing algebra with a topology (e.g. topological groups); Scholze’s thoughts on “the” cohomology of algebraic varieties; and perfectoid theory, which is used to reduce problems about rings in mixed characteristic to problems about rings in characteristic  $p$ .

I will not assume the audience has any prior familiarity with Scholze’s work.

Friday, March 12<sup>th</sup>, at 12 noon